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## L. Copolymers and Graft Polymers of Acrylonitrile

As of 01.01.2010

There are no objections to the use of copolymers and graft polymers of acrylonitrile (modified polyacrylonitriles) in the manufacture of commodities in the sense of § 2, Para. 6, No 1 of the Food and Feed Code (Lebensmittel- und Futtermittelgesetzbuch), provided they are suitable for their intended purpose and comply with the following conditions:

1. The use of starting materials for copolymers and graft polymers of acrylonitrile is subject to the Commission Regulation (EU) No 10/2011.

*The evaluation presented in the following refers to polymers from the following monomeric starting substances:*

*As monomers may be used:*

*Acrylonitrile*

*Acrylic acid methyl ester*

*Butadiene*

*Styrene*

*The butadiene must be the component of an elastomer made from the specified monomers which serves as graft basis for acrylonitrile and acryl acid methyl ester. The proportion of acrylonitrile in the co- and graft polymers must predominate in any case.*

2. Additives permitted by the Commission Regulation (EU) No 10/2011 may be used in compliance with the restrictions laid down therein. In addition to these, during manufacture and processing of the polymers, only the following production and processing aids<sup>1</sup> may be used, the residues or conversion products of which in the raw polymer or in finished products must not exceed the maximum amounts given:
  - a) Residues of conversion products of the following catalysts:
 

<ul style="list-style-type: none"> <li>Azobisisobutyronitrile</li> <li>Azodiisopentanoic acid nitrile</li> <li>Potassium or ammonium peroxydisulfate</li> <li>Sodium sulfite<sup>2</sup></li> </ul>	}	in total max. 0.2 %
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  - b) Residues of the following emulsifiers or suspending agents:
 

<ul style="list-style-type: none"> <li>Alkylaryl sulfonates</li> <li>Sodium, potassium and ammonium salts of sulfosuccinic acid esters with aliphatic saturated monohydric alcohols C<sub>4</sub>-C<sub>16</sub></li> <li>Polyethylene oxide adducts of alkyl phenols and their sulfatation products</li> <li>Polyvinyl alcohol (viscosity of 4 % aqueous solution at 20 °C, min. 5 cP)</li> <li>Polyvinyl pyrrolidone<sup>2</sup> and/or copolymers of vinyl pyrrolidone with esters of acrylic acid, methacrylic acid or with vinyl acetate</li> </ul>	}	in total max. 2.5 %
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<sup>1</sup> These production aids also include polymerisation regulators (e.g. dodecyl mercaptane or pentaerithrite-tetrakis-3-mercaptopropionate) that are occasionally used, and cross-linking agents. These substances are completely incorporated into the polymer during polymerisation.

<sup>2</sup> Permitted in accordance with the Commission Regulation (EU) No 10/2011. Migration of this substance into food-stuffs is regulated by the Commission Regulation (EU) No 10/2011.

- c) Residues of antifoam agents:  
Linear or branched organopolysiloxanes with methyl groups (silicone oil)<sup>3</sup>, (viscosity at 20 °C, min. 100 centistokes) after Section I of amended Recommendation XV<sup>4</sup>, in total, max. 1.0 %.

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<sup>3</sup> In part permitted in accordance with the Commission Regulation (EU) No 10/2011. Migration of this substance into foodstuffs is regulated by the Commission Regulation (EU) No 10/2011.

<sup>4</sup> Recommendation XV. "Silicones"